KOZHEUROV, Petr Il'ich; KUZNETSOV, Stepan Petrovich; CHERNOBROVKIN, V.P., kand. tekhn.nauk, nauchn. red.; SVET Ye.B., red.; KOLBYCHEV, V.I., tekhn. red.

[Cupola furnaces of the Southern Urals; from work practices of plants in Chelyabinsk Province] Vagranki IUzhnogo Urala; iz opyta raboty zavodov Cheliabinskoi oblasti. Cheliabinsk, Cheliabinskoe knizhnoe izd-vo, 1960. 73 p. (MIRA 17:3)

CHERNOBROVKIN, V.P.; ANAN'IN, A.A.; DOBRYDEN', A.A.; KAYBICHEV, A.V.

Comparative evaluation of foundry irons of the Ural plants. Lit. proizv. no. 5:8-10 My '61. (MIRA 14:5)
(Cast iron) (Ural Mountains—Metallurgical plants)

CHERNOBROVKIN, V.P.

Continuous charging of the cupola with charge materials. Lit. proizv. no.2:8 F '62. (MIRA 15:2)
(Cupola furnaces)

CHERNOBROVKIN, V.P.; ANAN'IN, A.A.; KAYBICHEV, A.V.; DOBRYDEN', A.A.

Gases in foundry iron. Izv.vys.uchob.zav.; chern.met. 5 no.4: 136-139 '62. (MIRA 15:5)

1. Ural'skiy filial AN SSSR.
(Gases in metals)

KAYBICHEV, A.V.; CHERNOBROVKIN, V.P.

Calculating the overheating of cast iron and position of the melting zone in cupolas. Izv. vys. ucheb. zav.; chern. met. 5 no.10:137-148 '62. (MIRA 15:11)

1. Institut metallurgii Ural'skogo filiala AN SSSR.
(Cupola furnaces) (Heat—Transmission)

KUZ'MIN, I.V.; CHERNOBROVKIN, V.P.

Effect of vacuum and gases on the chemical composition and structure of eutectic gray cast iron. Lit. proizv. no.5:34-35 My '62. (MIRA 16:3)
(Cast iron—Metallography) (Vacuum metallurgy)

CHERNOBROVKIN, V.P.; KAYBICHEV, A.V.; ANAN'IN, A.A.

Effect of gas removal from cast iron on the structure and form of graphite. Izv. vys. ucheb. zav.; chern. met. 6 no.4: 136-140 '63. (MIRA 16:5)

1. Ural'skiy filial AN SSSR.
(Gases in metals) (Cast iron—Metallography)

KAYBICHEV, A.V.; CHERNOBROVKIN, V.P.

Lower boundary of the melting zone in cupola furnaces. Lit. proizv. no.2:17 F '63. (MIRA 16:3)

(Cupola furnaces)

KUZ'MIN, I.V.; CHERNOBROVKIN, V.P.; ANAN'IN, A.A.

Effect of conditions of melting on the formation of ferrite in cast iron. Lit. proizv. no.6:28 Je '63. (MIRA 16:7)

(Melting) (Cast iron—Metallography)

KUZ'MIN, I.V.; CHERNOBROVKIN, V.P.; ANAN'IN, A.A.

Effect of individual gases on the structure of cast iron. Izv. vys. ucheb. zav.; chern. met. 6 no.6:161-167 '63. (MIRA 16:8)

1. Ural'skiy filial AN SSSR.
(Gases in metals) (Cast iron--Analysis)

KUZ'MIN, I.V.; CHERNOBROVKIN, V.P.; ANAN'IN, A.A.

Influence of a vacuum on the structure of cast iron. Lit. proizv. 5:31-32 My '64. (MIRA 18:3)

ANAN'IN, A.A.; CHERNOBROVKIN, V.P.; CHILIKINA, N.D., inzh., red.

[Melting cast irong in a cupola furnace] Plavka chuguna v vagranke. Izd.2., Moskva, Izd-vo "Mashinostroenie," 1964. 56 p. (MIRA 17:8)

ANAN'IN, A.A.; BRILAKH, M.M.; CHERNOBROVKIN, V.P.; BLANK, E.M., inzh., retsenzent; CHILIKINA, N.D., inzh., red.; SIROTIN, A.I., red.izd-va; SMIRNOVA, G.V., tekhn.red.

[Cupola furnace operator] Vagranshchik. Izd.3., dop. Moskva, Mashgiz, 1964. 163 p. (MIRA 17:3)

SHATOV, A.Ya.; CHERNOBROVKIN, V.P.

Nonmetallic inclusions in acid electric steel during its alloying in the ladle. Izv. vys. ucheb. zav.; chern. met. 7 no.10:55-58 '64. (MIRA 17:11)

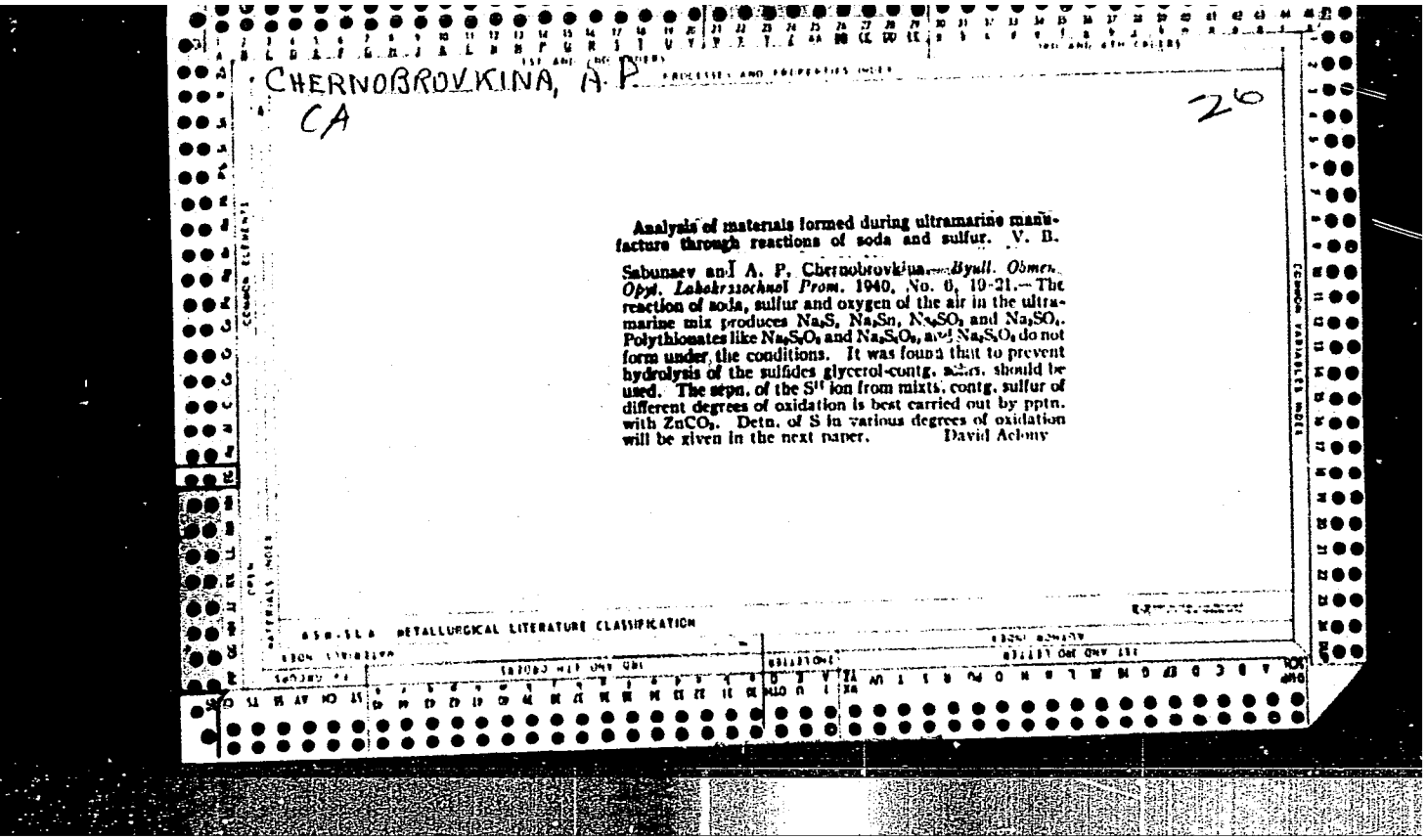
1. Institut metallurgii Ural'skogo filiala AN SSSR.

SHATOV, A.Ya.; CHERNOBROVKIN, V.P.

Volume shrinkage of steel smelted in an acid electric furnace.
Lit. proizv. no.6:31-32 Je '64. (MIRA 18:5)

CHERNOBROVKIN, Yu.G.; BELAVIN, L.P.

Die casting in small batch production. Lit. proizv. no.8:30 Ag '63. (MIRA 16:10)



CHERNOBROVKINA, A. P.

CA

26

Analysis of materials formed during ultramarine manufacture through reactions of soda and sulfur. V. B. Sabunaev and A. P. Chernobrovkina. *Byull. Obmen. Opyt. Lakokrasochnoi Prom.* 1940, No. 6, 19-21.—The reaction of soda, sulfur and oxygen of the air in the ultramarine mix produces Na_2S, Na_2Sn, Na_2SO_3 and Na_2SO_4. Polythionates like $Na_2S_2O_3$ and $Na_2S_4O_6$, and $Na_2S_2O_4$ do not form under the conditions. It was found that to prevent hydrolysis of the sulfides glycerol-contg. solns. should be used. The detn. of the S^{II} ion from mixts. contg. sulfur of different degrees of oxidation is best carried out by pptn. with $ZnCO_3$. Detn. of S in various degrees of oxidation will be given in the next paper. David Aelony

METALLURGICAL LITERATURE CLASSIFICATION

L 37648-66 EWT(1)/FCC GW

ACC NR: AP6018927 SOURCE CODE: UR/0203/66/006/003/0599/0600

46

B

AUTHOR: Kazimirovskiy, E. S.; Kokourov, V. D.; Chernobrovkina, N. A.

ORG: Institute of Earth Magnetism, Ionosphere and Propagation of Radio Waves SO AN SSSR (Institut zemnogo magnetizma, ionosfery i rasprostraneniya radiovoln SO AN SSSR)

TITLE: Angular spectrum of waves scattered by the ionosphere

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 3, 1966, 599-600

TOPIC TAGS: ionospheric scatter, angular distribution, radiosonde, reflected signal

ABSTRACT: Angular characteristics of scattered signals were investigated in Irkutsk in 1962-1964 on the basis of vertical radioprobing of the ionosphere. A formula developed by Briggs (1951) for the determination of θ_0, a cone of concentration of scattered energy, was used. The formula is as follows:

$$N = (2v/\lambda)\sin\theta_0/2,$$

where N is the frequency of fading of a reflected signal, v is the drift velocity of inhomogeneities, λ is the working wavelength of a probing pulse. 300 observations of reflections from the F region at $2.25 \cdot 10^6$ cps were made during the autumn-winter period from 1800 to 0800 hr. The velocity of horizontal drift was evaluated using a meth-

UDC: 550.388.2

Card 1/2

L 37648-66

ACC NR: AP6018927

od developed by Kazimirovskiy and Kokourov (1961). The data show that the widths of distribution of angular spectra obey the Rayleigh law, and that the most probable value of θ_0 is 7.5°. θ_0 angles over 24° are extremely rare. Orig. art. has: 1 figure, 1 formula.

[14]

SUB CODE: 04,20/ SUBM DATE: 25Oct65/ ORIG REF: 003/ OTH REF: 004

Card 2/2

CHERNOBROVKINA, Yelena, tekhnik-konstruktor

The control staff of the seven-year plan at work. Rabotnitsa 40 no.3:4-5 Mr '62. (MIRA 16:2)

1. Moskovskiy stankostroitel'nyy zavod imeni Sergo Ordzhonikidze.
(Moscow--Machine-tool industry--Management)
(Women--Employment)

GOL'DMAN, A.L., inzhener; CHERNOBROVKINA, Ye.S., inzhener; GROBMAN, R.M.

Cold rolled transformer steel. Stal' 7 no.3:231-235 '47.
(MLRA 9:1)

1.Verkh-Isetskiy metallurgicheskiy zavod.
(Sheet steel) (Rolling (Metalwork))

CHERNOBROVOV, N.V., inzhener.

"Present-day relay protection." G.I.Atabekov, A.M.Fedoseev. Reviewed by N.V.Chernobrovov. Elektrichestvo no.1:88-89 Ja '49. (MLRA 7:10)

1. Mosenergo.
(Electric relays) (Atabekov, G.I.) (Fedoseev, A.M.)

CHERNOBROVOV, N.V.

1. MEL'NIKOV, M. F., Engs.; CHERNOBROVOV, N. V.; CHERNYAYEV, P. D.

2. USSR (600)

4. Electric Relays

7. Blocking relay for improving the protection of long 220 KV transmission lines, Elek. sta., 23, No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

CHERNOBROVOV, Nikolay Vasil'yevich; BERKOVICH, M.A., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Protective relaying] Releinaia zashchita. Moskva, Ges.energ.izd-vo, 1956. 495 p. (MLRA 10:4)
(Electric relays)

CHERNOBROVOV, N.V.

YERMOLENKO, V.M., red.; KAZANSKIY, V.Ye., inzh., red.; KNYAZEVSKIY, B.A., red.; MALOV, V.S., red.; SYROMYATNIKOV, I.A., doktor tekhn.nauk, prof., red.; TSAREV, M.I., kand.tekhn.nauk, red.; CHERNOBROVOV, N.V., red.; LARIONOV, G.Ye., tekhn.red.

[Electric relays, automatic and remote control of electric power systems; papers of a scientific conference on problems of electric relays, automatic and remote control] Releinaia zashchita, avtomatika i telemekhanika energosistem; materialy nauchno-tekhnicheskoi konferentsii [po voprosam releinoi zashchity, elektricheskoi avtomatiki i telemekhaniki]. Moskva, Gos. energ. izd-vo, 1957. 231 p. (MIRA 11:3)

1. Nauchno-tekhnicheskoye obshchestvo energeticheskoy promyshlennosti. Moskovskoye pravleniye. 2. Mezhdunarodnye elektricheskiye svyazi SSSR (for Syromyatnikov). 3. TSentral'naya nauchno-issledovatel'skaya elektrotekhnicheskaya laboratoriya (for TSarev). 4. Gosudarstvennyy trest po organizatsii i ratsionalizatsii elektrostantsii (for Kazanskiy)

(Electric relays) (Automatic control)
(Remote control)

8(2) PHASE I BOOK EXPLOITATION SOV/2366

Chernobrovov, Nikolay Vasil'yevich

Releynaya zashchita (Relay Protection) 2d ed. Moscow, Gosenergoizdat, 1959. 591 p. Errata slip inserted. 25,000 copies printed.

Ed.: M. A. Berkovich; Tech. Ed.: G. I. Matveyev.

PURPOSE: This book was approved by the Administration of Secondary Specialized Schools, Ministry of Higher Education, USSR, as a textbook for students of tekhnikums specializing in the generation and distribution of electric power. It may also be useful to electrical engineering students of vuzes and to engineers and technicians engaged in the design, installation and operation of relay protection systems for power plants and power distribution networks.

COVERAGE: This second edition has been enlarged mainly by the addition of a chapter on methods of preventing failure of circuit breakers to open and close. The author discusses various types of protective systems such as overload current protection, directional overload protection, differential protection, remote protection and high-frequency protection. He also describes

Card 1/14

protection against short-circuiting to ground, protection of generators, transformers, generator-transformer sets, generator-transformer-line sets, electric motors and busbars. Various types of relays used in protective systems are also discussed. The author thanks A. M. Averbukh; Professor G. I. Atabekov, Doctor of Technical Sciences; M. A. Berkovich, V. V. Il'inichnin, I. V. Kovalenskiy, M. F. Mel'nikov and V. A. Semenov for reviewing the text. There are no references.

TABLE OF CONTENTS

ZABEZHANSKIY, I.I., inzh.; CHERNOBROVOV, N.V., inzh.

Experience in the operation of an automatic voltage regulation system. Elek. sta. 34 no.9:23-25 S '63. (MIRA 16:10)

ATABEKOV, G.I.; BELOUSOV, M.M.; BULGAKOV, K.V.; VASIL'YEV, D.V.; YEGIZAROV, I.V.; ZAKHAROV, S.N.; ZEYLIDZON, Ye.D.; KOSTENKO, M.P.; MANOYLOV, V.Ye.; NARNEVSKIY, B.I.; RYZHOV, P.I.; SOLOV'YEV, I.I.; SYROMYATNIKOV, I.A.; FABRIKANT, V.L.; CHERNIN, A.B.; CHERNOBROVOV, N.V.; FEDOSEYEV, A.M.; SHABADASH, B.I.; SHCHEDRIN, N.N.; FATEYEV, A.V.

Viktor Ivanovich Ivanov, 1900-1964; an obituary. Elektrichestvo no.11:89 N '64. (MIRA 18:2)

NEPOROZHNIY, P.S.; SAVINYKH, A.P.; SAPOZHNIKOV, F.V.; SERDYUKOV, N.P.; ACHKASOV, D.I.; BURGSDORF, V.V.; NEMOV, N.P.; SYROMYATNIKOV, I.A.; KNYAZEVSKIY, B.A.; ROKOTYAN, S.S.; STEKLOV, V.Yu.; FEDOSEYEV, A.M.; GRUDINSKIY, P.S.; KHOMYAKOV, M.V.; VENIKOV, V.A.; CHERNOBROVOV, N.V.; MEL'NIKOV, N.A.; BERSHADSKIY, I.S.

Aleksandr Dmitrievich Romanov, 1905; on his 60th birthday. Elek. sta. 36 no.11:94 N '65. (MIRA 18:10)

L 24820-66 EWT(d)/EWT(m)/EWP(h)/EWP(l)/ETC(m)-6 DIAAP JD/JG

ACC NR: AP6006954 (A) SOURCE CODE: UR/0381/65/000/006/0041/0046

AUTHORS: Shtan', A. S.; Chernobrovov, S. V.; Firstov, V. G.; Sul'kin, A. G.

ORG: none

TITLE: Problems in radiation defectoscopy

SOURCE: Defektoskopiya, no. 6, 1965, 41-46

TOPIC TAGS: gamma ray, x ray, radiometry, exposure meter, stereoscopic photography, defectoscope / RID-21 defectoscope, RK-2 defectoscope, UGD-3 defectoscope, IRA-1 pulse device, RUP-120-5 defectoscope, RUP-200-5 defectoscope, RUP-150/500-10 defectoscope

ABSTRACT: The automation and mechanization problems in radiation defectoscopic techniques are discussed in some detail. Among the more important problems in this area are those pertaining to control of feeding parts to the radiation area, to radiation of parts with programmed controls, to developing of films, and to decoding the recorded information. The development of automatic gamma-ray and x-ray exposure meters is considered to be of great importance in the Soviet countries. Stereoscopic photography applied to radiation defectoscopy is another new development in the Soviet countries; it has the advantage of three-dimensional visualization of defects in the various parts under investigation. There seems to be a great need for improving the quality of auxiliary defectoscope equipment. In

Card 1/2 UDC: 620.179.152

L 24820-66
ACC NR: AP6006954

particular, there is a distinct lack of high energy, 1 to 2000-kv x-ray equipment. Recent trends in construction of γ- and x-ray equipment have centered on monoblock devices of series RUP-120-5 and 200-5, on a new universal device of series RUP-150/500-10, and pulse devices IRA-1. Portable cesium-137 radiometers are currently popular. Among the new developments are devices with special safeguards against radiation hazards, including automatic on-off control systems. A new series of radioisotope defectoscopes are now being marketed under the markings of RID-21, RK-2, and UGD-3. To improve the control capability on these defectoscopes, it is suggested that xerography be tried for significantly reducing exposure times. All in all, advanced automatic defectoscopes can be very useful in machine design, metallurgy, shipbuilding, and the aviation industry.

SUB CODE: 14, 18/ SUBM DATE: 04Sep65

Card 2/2

L 29166-66

ACC NR: AP6018890 SOURCE CODE: UR/0104/65/000/011/0094/0094

AUTHOR: Koporozhniy, P. S.; Savinykh, A. P.; Sapozhnikov, F. V.; Serdyukov, N. P.; Achkasov, D. I.; Burgsdorf, V. V.; Nomov, N. P.; Syromyatnikov, I. A.; Knyazevskiy, B. A.; Rokotyan, S. S.; Steklov, V. Yu.; Fedoseyev, A. M.; Grudinskiy, P. S.; Khomyakov, M. V.; Venikov, V. A.; Chernobrovov, N. V.; Mel'nikov, N. A.; Bershadskiy, L. S.

ORG: none

TITLE: Honoring the 60th birthday of Aleksandr Dmitriyevich Romanov

SOURCE: Elektricheskiye stantsii, no. 11, 1965, 94

TOPIC TAGS: electric power plant, industrial personnel

ABSTRACT: In July 1965 A. D. Romanov celebrated his 60th birthday and the 35th anniversary of his active life as a major designer, operator, and builder of electric power stations. On his graduation in 1927 from the Moscow College of Engineering, Aleksandr Dmitriyevich joined the Mosenergo Moscow Power System where he steadily rose through the ranks until he became Deputy Chief Engineer, while at the same time participating in the design and practical introduction of 500-kV electric transmission lines running from Moscow to Volzhskaya Hydroelectric Power Station and from Kuybyshev to the Urals. Since 1959 A. D. Romanov has been Chief Engineer at the Glavvostokelektrosetstroy Main Administration for Power Grid Construction in Eastern USSR of the

Card 1/2

ACC NR: AP6018890

State Production Committee for Energetics and Electrification USSR. Along with his active work, since 1930 A. D. Romanov has been teaching courses in Power Networks and Systems as well as in Power Stations and Substations at the Moscow Correspondence Institute of Energetics and, later, at the All-Union Correspondence Institute of Energetics, and, in this capacity, has trained new cadres of power engineers. In 1957 the title of Assistant Professor was conferred on him and in 1963, the title of Candidate of Technical Sciences. He has published more than 40 scientific and technical articles on power engineering and construction and he is a member of the editorial boards of the periodic anthologies Energeticheskoye Stroitel'stvo (Power Construction) and Energeticheskoye Stroitel'stvo za Rubezhom (Power Construction Abroad). He has been a Party member since 1932 and is the bearer of the Order of Labor Red Banner as well as of various medals. Best wishes for further creative work are extended to him. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 10 / SUBM DATE: none

Card 2/2

SMAGLIN, Georgiy Savel'yevich; SHCHENKOV, V.V., inzh., retsenzent; KRYZHKO, I.S., inzh., retsenzent; CHERNOBROV, S.M., red.

[Electrolytic production of magnesium] Elektroliticheskoe proizvodstvo magniia. Moskva, Metallurgiia, 1965. 150 p. (MIRA 18:7)

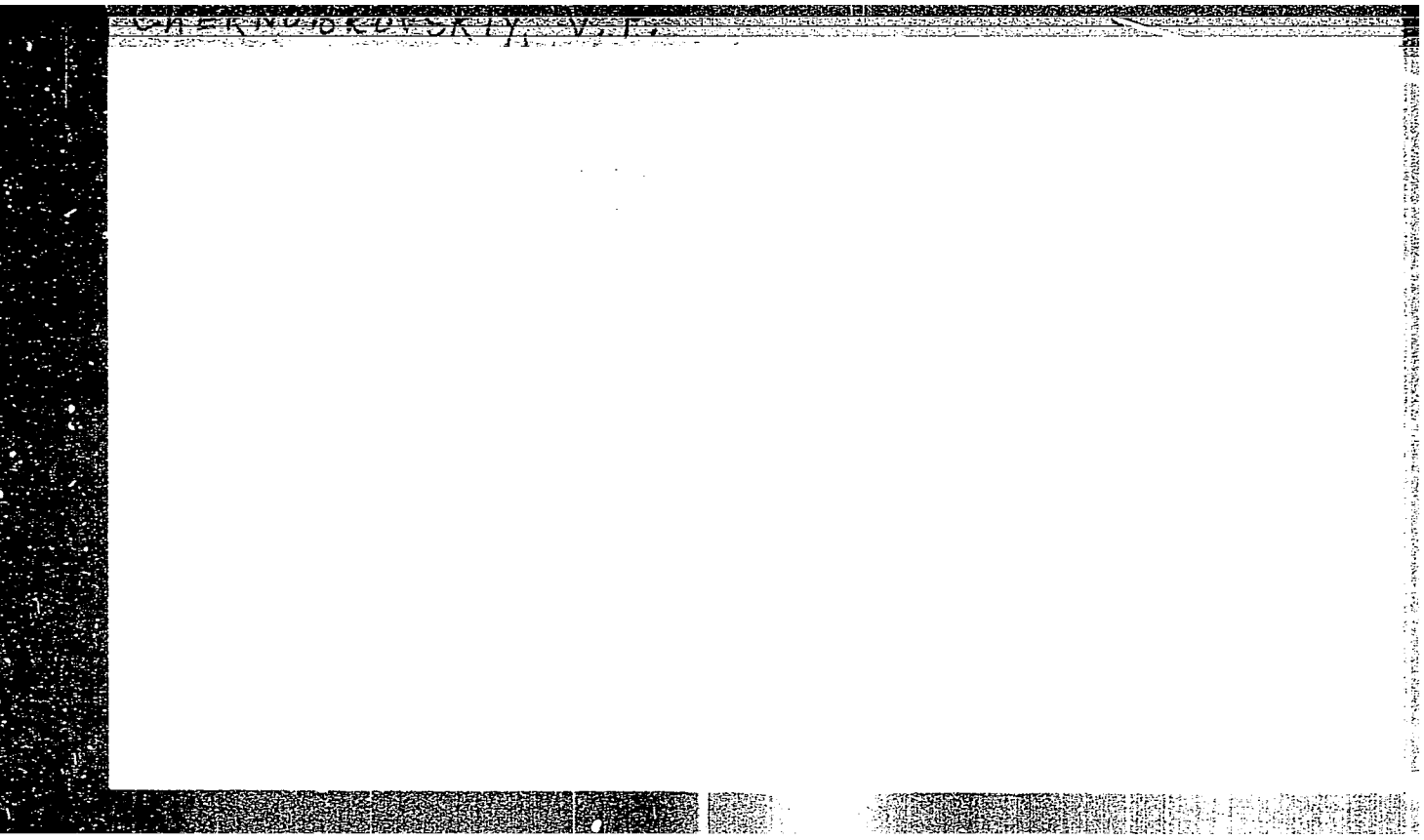
CHERNOBROVOV, S.V.

Defektoskopiya metallov; sbornik statey (Flaw Detection in Metals; Collection of Articles) Moscow, Oborongiz, 1959. 453 p. Errata slip inserted. 4,550 copies printed.

Ed.: D.S. Shrayber, Candidate of Technical Sciences; Ed.: M.S. Lagovskaya; Tech. Ed.: V.P. Rozhin; Managing Ed.: A.S. Zaymovskaya, Engineer.

PURPOSE: This book is intended for engineers and technicians in the field of nondestructive inspection and testing of metals.

COVERAGE: This collection of articles deals with methods of nondestructive inspection and testing of metals. Results of investigations conducted at scientific research institutes and plants of magnetic, electrical, X-ray, ultrasonic, and fluorescent-penetrant methods of flaw detection are described. Detailed descriptions of flaw-detection methods and equipment are presented. Data are given on the status of the development of flaw-detection methods in non-Soviet countries. No personalities are mentioned. References follow several of the articles.



KHRAPOV, A.Ya., inzh.; CHERNOBROVSKIY, V.P., inzh.

Distribution of elements in liquid cast iron before and after adding magnesium. Izv. vys. ucheb. zav.; chern.met. no.5:41-49 My '58. (MIRA 11:7)

1.Sibirskiy metallurgicheskiy institut i Institut metallurgii Ural'skogo filiala AN SSSR.
(Liquid metals--Analysis) (Cast iron--Analysis) (Magnesium)

CHERNOBROVTSEV, M. S.

"Growth and Development of Spot-Seeded Oaks During the First Years of Growth," Les. khoz., 5, No.4, 1952

1. CHERNOBROVTSEV. M. S.

2. USSR (600)

4. Oak

7. Classification of trees by growth and development and its application to oak forests. Les.khoz. 5 No 11. 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

Chernobrovtsev, M.S.

K-4

USSR / Forestry. Forest Economy.

Abs Jour: Ref Zhur - Biologiya, No. 1, 1958, 1341

Author : Chernobrovtsev, M.

Inst : Voronezh Forest Engineering Inst, 1956, 15, 27-33

Title : Forming Plantations of Young Oaks and Thinning Them

Orig Pub: Nauchn. zap. Voronezhsk. lesotekhn. in-ta, 1956, 15, 27-33

Abstract: The work was done on young oak plantations of the forest study and test area of the Voronezh Forest Engineering Institute. The growth and development classifications in the investigated plantings were found to be closely connected

Card 1/3

USSR / Forestry. Forest Economy. K-4

Abs Jour: Ref Zhur - Biologiya, No. 1, 1958, 1341

with a series of morphological characteristics. In thinning out oaks it is recommended that each tree's light exposure be estimated by the five-mark system. In groves of young oaks /? nizkostvol'nik/, in addition to care of the condition of the forest as a whole, the form of the trunk, and the growth of the individual tree, the goal of rejuvenation must be sought also. Thinning should commence when the trees are three years old. In the first place the trees of subclass B (according to V.G. Nesterov) should be taken out, striving in this manner for rejuvenation of the whole grove. If care is taken of the form of the trunk in the period when the grove is purged and cleansed the commercial value of the young plantation can be raised 150-200%, and if the grove's thickness is sufficient, it can be transformed into a

Card 2/3

USSR / Forestry. Forest Economy. K-4

Abs Jour: Ref Zhur - Biologiya, No. 1, 1958, 1341

stand of timber differing little, in terms of commercial lumber, from a forest grown from seed. The young trees ten or 15 years of age should be thinned by removing the tallest ones [?] and when older by cutting out the lowest, which, however, does not exclude the possibility and even necessity of thinning out the upper stratum.

Card 3/3

CARD: 1/1

K

COUNTRY : USSR
CATEGORY : Forestry. Forest Cultures.

ABS. JOUR.: Ref Zhur-Biologiya, No. 5, 1959, No. 20153

Author : Chernobrovtsev, M.S.
INST. :
TITLE : Spruce Hill Cultures.

ORIG. PUB.: Nauchn. dokl. vyssh. shkoly. Lesoinzh. delo, 1958, No.2, 6-9

ABSTRACT : At Sudogodskiy forest range in Vladimirskaya Oblast 2-3 year old spruce seedlings were planted 10-20 individuals clustered in one hole at a single planted locality. The planting was overgrown with birch and was not cared for. At 35-40 years of age the spruce plantings were studied in comparison with ordinary regular spruce plantings at four test plots; the results of measurements are given. --V.I. Klimov

CARD: 1/1

CHERNOBROVTSEV, M.S.

Doc Agr Sci - (diss) "Setting up oak sprouting /poroslevyye/ plantings and improvement cutting thereof." Moscow, 1961. 35 pp; (Moscow Order of Lenin Agricultural Academy imeni K. A. Timiryazev); 200 copies; price not given; list of author's works at end of text (14 entries); (KL, 6-61 sup, 230)

CHERNOBROVTSEV, Sergey Vasil'yevich

[Ivanovo Province during the years of the Soviet regime] Ivanovskaia oblast' za gody Sovetskoi vlasti. Ivanovo, Ivanovskoe knizhnoe izd-vo, 1959. 63 p. (MIRA 13:2)
(Ivanovo Province--Economic conditions)

CHERNOBRYVENKO, S.I., doktor biol.nauk (Dnepropetrovsk).

More vegetable proteins. Nauka i zhyttia 10 no.2:23-24 F '60.
(MIRA 13:6)

1. Chlen-korrespondent Ukrainskoy akademii sel'skokhozyaystvennykh nauk.

(Legumes)

CHERNOBUK, I.

Feeders with pipeless automatic stock waterers. Sel'. stroi. 15 no.7:27 Jl '60. (MIRA 13:8)

1. Glavnyy inzhener Gulyay-Pol'skoy mezhkolkhoznoy stroitel'noy organizatsii Zaporozhskoy oblasti USSR.
(Cattle--Watering)

CHERNOBUK, I.

Economical doorframes. Sel'.stroi. 15 no.4:27 Ap '60.
(MIRA 16:1)

(Doors) (Concrete products)

CHERNOBUK, I.; DOMASHENKO, I.

Assembling spanless girders. Sel'.stroi. 15 no.6:10 Je '60. (MIRA 13:8)
(Girders)

CHERNOBUK, I.

Manufacture of arched slabs. Prom.stroi. i inzh. soor. 4 no.4:13-15 Jl-Ag '62. (MIRA 15:9)

1. Nachal'nik otdela tekhnicheskogo kontrolya stroitel'nogo kombinata No.1 tresta "Dneprostroydetal'".
(Concrete slabs)

CHERNOBYL'SKAYA, E.I. (Kiyev); TSIKUNOV, I.K. (Kiyev)

Sylov p-subgroups of orthogonal and simplex groups in hyperbolic space. Ukr. mat. zhur. 15 no.3:290-298 '63. (MIRA 16:12)

CHERNOBYL'SKAYA, E-I.

~~CHERNOBYL', E. I.,~~ KLIMENKO, A. P, KANEVETS, G. E., and GAYDUK, B. V.

"More Accurate Design of Heat Exchangers."

Report submitted for the Conferences on Heat and Mass Transfer, Minsk, BSSR, June 1961.

CHERNOBYL'SKAYA E. I., KLIMENKO, A. P., KANEVETS, G. E., and GAYDUK, D. V.

"Calculation Method of the Optimum Heat Exchangers by Electron computers."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

TROITSKIY, I.D., kand.tekhn.nauk; CHERNOBYL'SKAYA, I.M., inzh.

Methods for determining the electrical strength of rubbers. Vest. elektroprom. 34 no.5:18-21 My '63. (MIRA 16:5)
(Rubber--Electric properties)
(Electric insulators and insulation)

CHERNOBYL'SKAYA, M. N.

Chernobyl'skaya, M. N., and Rubenchik, L. I. - "On the effect of certain biological active substances on the Clostridium acetobutylicum," Doklady Akad. nauk Ukr. SSR, No. 6, 1948, p. 3-6, (In Ukranian, resume in Russian)

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949)

CHERNOBIL'S'KA, M.N., kandidat biologichnikh nauk.

Direct observation of soil microflora for the prevention of the oxidation of beer in the acetone-butyl industry. Nauk.zap.Kiev. un. 8 no.3:33-39 '49. (MLRA 9:10)

(Soil micro-organisms) (Fermentation)

CHERNOBYL'SKAYA, M. N., RUS'KO, A. N.

Rye - Diseases and Pests

Acetone-butyl fermentation in the treatment of rye flour with ergot impurity. Nauk. zap. Kyiv. un. 9 no. 7, 1950.

9. Monthly List of Russian Accessions, Library of Congress, July 1953, Uncl.

1. CHERNOBYL'SKAYA, M. N. AND SLINYAKOVA, I.B.

2. USSR (600)

7. "Concerning a Method of Discovering Infection in the Acetone-butyl Industry", Naukovi Zapiski Kiivs'k. Derzhav. Univers. im. T.T. Shevchenko (Scientific Notes of the Kiev State University imeni T.T. Shevchenko), Vol 9, No 8, 1950, pp 145-149.

9. Mikrobiologiya, Vol XXI, Issue 1, Moscow, Jan-Feb 1952, pp 121-132. Unclassified.

CHERNOBYLSKAYA, M.N.

USSR /Microbiology. Soil Microbiology. F-3

Abs Jour: Referat. Zh.-Biol., No. 9, 1957, 35603

Author : Rubenchik, L.I.; Chernobylskaia, M.N.; Kilchevskaia, A.A.

Title : Microbiological Characterizations of Some Soils of the Irpen Basin (Poles'ye Ukn SSR)

Orig Pub: Naukovi zap. Liivsk. un-ta, 1953, 12, No. 7, 21-26

Abstract: No abstract.

Card 1/1

CHERNOBYL'SKAYA, M.N.; RUS'KO, A.N.; VERBSKAYA, A.Ya.

Effect of ash elements on the development of acetone-butyl bacteria.
Nauk.zap.Kiev.un.12 no.7:27-35 '53. (MLRA 9:10)
(Clostridium acetobutylicum)

CHERNOBYL'SKAYA, M.N.

RUBENCHIK, L.I.; CHERNOBYL'S'KA, M.N.; SMALIY, V.T.

Fertilizing young pear and apple trees with azotobacterin.
Mikrobiol. zhur. 15 no.3:32-34 '53. (MLRA 8:1)
(AZOTOBACTER) (APPLE) (PEAR)

RUBENCHIK, L.I.; CHERNOBYL'SKAYA, M.N.; KIL'CHEVSKAYA, A.A.

Effect of granosan on Azotobacter chroococcum. Mikrobiol.zhur. 16 no.4:19-25 '54. (MLRA 10:1)

1. Z Kiivs'kogo derzhavnogo universitetu imeni T.G.Shevchenka.
(GRANOSAN) (AZOTOBACTER)

BORINA, M.Ya., student 4 kursu; CHERNOBIL'SKA, M.N., dotsent, nzukoviy kerivnik.

Effect of certain micro-organisms on the course of acetone-butyl fermentation. Stud.nauki.pratsi no.20:149-155 '56. (MLRA 9:12)
(Clostridium acetobutylicum) (Fermentation)

AUTHORS: Rubenchik, L. I., Chernobyl'skaya, M. N., Kil'chevskaya, A. A., Filanovskaya, A. N. 20-114-6-49/54

TITLE: The Influence Exerted by the Volatile Secretions of Actinomycetes Upon Bacteria (Vliyaniye letuchikh vydeleniy aktinomitsetov na bakterii).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 114, Nr 6, pp. 1315-1316 (USSR)

ABSTRACT: Antibacterial substances were, among others, determined in the volatile secretions of some fungi of the species Trichoderma (reference 4). The authors studied 4 species of Actinomycetes. As test objects they used 4 species of bacteria in which the influence of the above-mentioned fungi was determined. The fungi were cultivated in Petri dishes, the bacteria in the covers of these dishes. A layer of air of 12-14 mm thickness thus separated both types in such a "two-storey" culture. Therefore only the volatile secretions of the fungi could act upon the bacteria. In the control dishes the lower "storey" was not inhabited. The culture lasted 72 hours at 28°. The results are given in table 1. A stimulating influence was exerted by: Actinomyces griseus subsp. variabilis and Act. coelicolor upon Bac. subtilis and Bac. mesentericus; Act. globisporus var. diastaticus upon Bact. coli, Bac. subtilis

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000308520011-1"

The Influence Exerted by the Volatile Secretions of Actinomycetes Upon Bacteria. 20-114-6-19/54

and Bac. mesentericus; Act. griseus upon Bact. coli. Microc. aureus remained uninfluenced of all investigated species. From dishes in which Actinomycetes were cultivated alone the authors brought drops of water of condensation from the cover into colonies of bacteria. Tap water served as control. No differences in the growth of the colonies of bacteria could be determined. The volatile secretions of the Actinomycetes apparently are little soluble or insoluble in water. The tests with Act. griseus, Act. albus and Act. violaceus which grew at the bottom of the Petri dishes, and with Azotobact. chroococcus (strain K) at the cover showed that the volatile substances of the fungi may serve as source of carbon and energy for this bacterium. This source was not full value, however, as the colonies of Azotobacter grew only weakly and slowly. But without Actinomycetes they did not develop at all.
There are 1 table and 5 references, all of which are Slavic.

ASSOCIATION: Kiyev State University imeni T. G. Shevchenko (Kiyevskiy gosudarstvennyy universitet imeni T. G. Shevchenko).

The Influence Exerted by the Volatile Secretions of Actinomycetes Upon Bacteria. 20-1~~14-6-49/54~~

PRESENTED: May 9, 1957, by V. N. Shaposhnikov, Member of the Academy.

SUBMITTED: May 8, 1957

Card 3/3

ZORIN, V.N.; KONYUKHOV, I.N.; VINOGRADOV, B.N.; CHERNOBYL'SKIY, A.G.; ALEKSANDROV, V.S.

Reduction turbodrill for drilling slim and deep wells. Trudy MINKHiGP 46:27-34 '64. (MIRA 17:6)

SRAPIYANTS, R.A.; CHERNOBYL'SKIY, A.G.

Method of neutron activation analysis for evaluating the wear of the cylinders and piston rings of a compressor. Mash. i neft. obor. no.10:30-34 '64 (MIRA 18:1)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akademika Gubkina.

Chernobyl'skiy, G.I.

LEONT'YEV, B.I.; LYUKSENBURG, M.S., kandidat tekhnicheskikh nauk, retsenzent; CHERNOBYL'SKIY, G.I., inzhener, retsenzent; PAVLOV, S.A., doktor tekhnicheskikh nauk, professor, spetsredaktor; IVANOVA, N.M., redaktor. DUBOVKINA, N.A., tekhnicheskiy redaktor

[Manual on processing hides] Rukovodstvo po obrabotke kozhsyr'ia. Moskva, Pishchepromizdat, 1953. 158 p. [Microfilm] (MLRA 7:10)
(Leather industry)

Chernobyl'skiy, I. G.

137-1958-2-2493

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 44 (USSR)

AUTHORS: Gratsianov, Yu. A., Chernobyl'skiy, I. G.

TITLE: On the Use of Vibration on a Crystallizing Ingot (K voprosu o primenenii vibratsii k kristallizuyushchemusya slitku)

PERIODICAL: Sb. tr. Tsentr. n.-i. in-t chernoy metallurgii, 1956, Nr 15, pp 164-218

ABSTRACT: A short survey is given of earlier work on the vibration of solidifying alloys. A study was made of the effect of harmonic and jarring vibrations on 1-35 kg ingots of steel A20 and of the alloys N79M4, N35MV, and N25Yu9. The temperature before pouring was kept the same in all the experiments. The study was conducted in frequency ranges of 1-60 cps with 0.3-1 mm amplitudes for the harmonic vibrations, and 2-13 cps with 1.2-4 mm amplitudes for the jarring vibrations. It was found that the vibration of a crystallizing ingot has a pronounced refining effect on its (cast) grain and increases its density and that, moreover, the action of the jarring vibrations is stronger (requiring a smaller frequency and amplitude to produce the same effect).

Card 1/3

On the Use of Vibration on a Crystallizing Ingot

Each alloy, however, was found to have its optimum vibrating conditions, outside of which the vibrations affected the structure of the ingot either insufficiently or detrimentally, causing the appearance of longitudinal liquation bands, S-enriched in the case of steel A20, C-enriched in the case of the alloy N35MV, and Nb-enriched and perhaps Al-enriched in the case of the alloy N25Yu9. The effective removal of gases achieved by the vibrations made it possible in the experiments, starting from gas-contained alloys, to produce ingots with a close-grained skin and few gas blisters in the central part. The shrinkage head functioned most satisfactorily when the ingot was vibrating. It is recommended that heating riser compounds not be used to improve the effectiveness of the feeding, because the vibrations agitate the steel very vigorously inside the mold, and this can contaminate the steel (the effect of this stirring action was tested with an Fe isotope). To increase the efficiency of the shrinkage head operation when the ingot vibrates, the suggestion is made that the liquid surface of the shrinkage head be heated by a gas or electrical method, to be adopted after suitable laboratory testing. The appearance under certain conditions of liquation bands during vibration of an ingot is accounted for in terms of

137-1958-2-2493

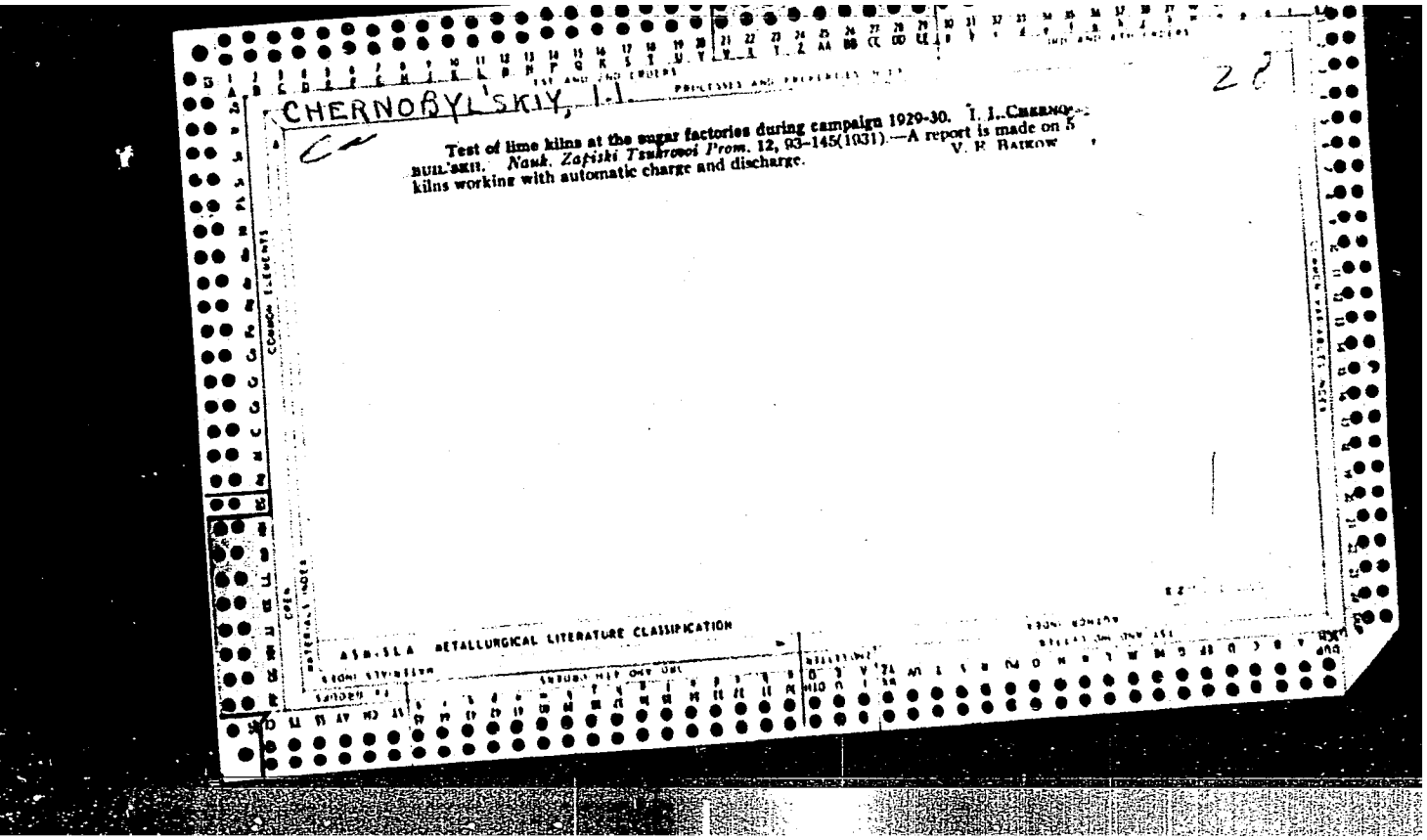
On the Use of Vibration on a Crystallizing Ingot

the crystallization in depth, since the vigorous agitation or stirring of the alloy during crystallization will create, as of a certain moment, the necessary conditions for the formation and growth of crystals throughout the alloy. It thus becomes fully possible to improve the quality of an ingot by applying this vibration method during the crystallization process. A brief survey is given of the work being done in this field.
Bibliography: 19 references.

A. R.

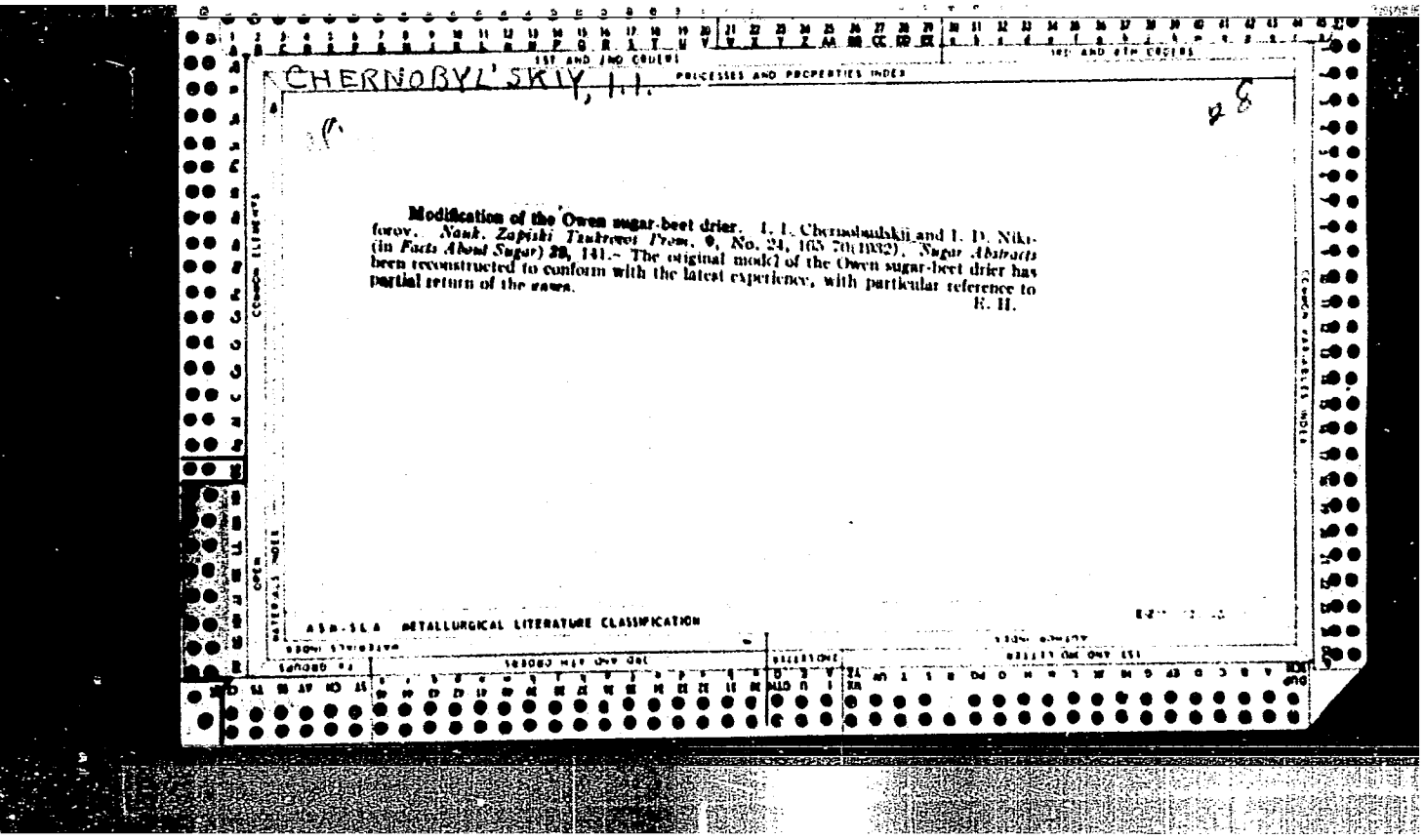
1. Ingots--Crystallization 2. Vibration--Applications

Card 3/3


CHERNOBYL'SKIY, I.I.

Test of lime kilns at the sugar factories during campaign 1929-30. I. I. CHERNOBYL'SKIY. *Nauk. Zapiski Tsukrovoi Prom.* 12, 93–145(1931).—A report is made on 5 kilns working with automatic charge and discharge. V. P. RATKOW

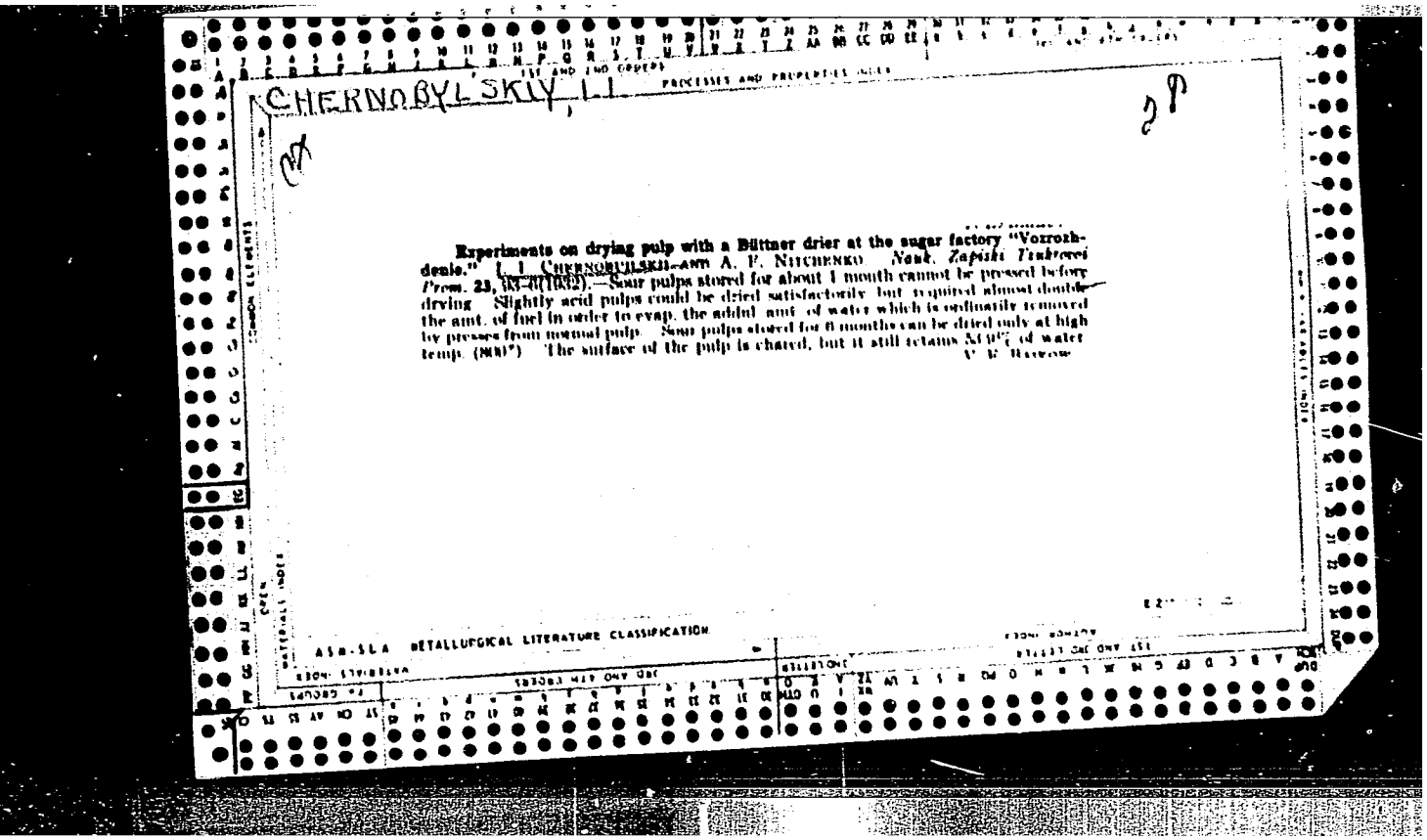
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

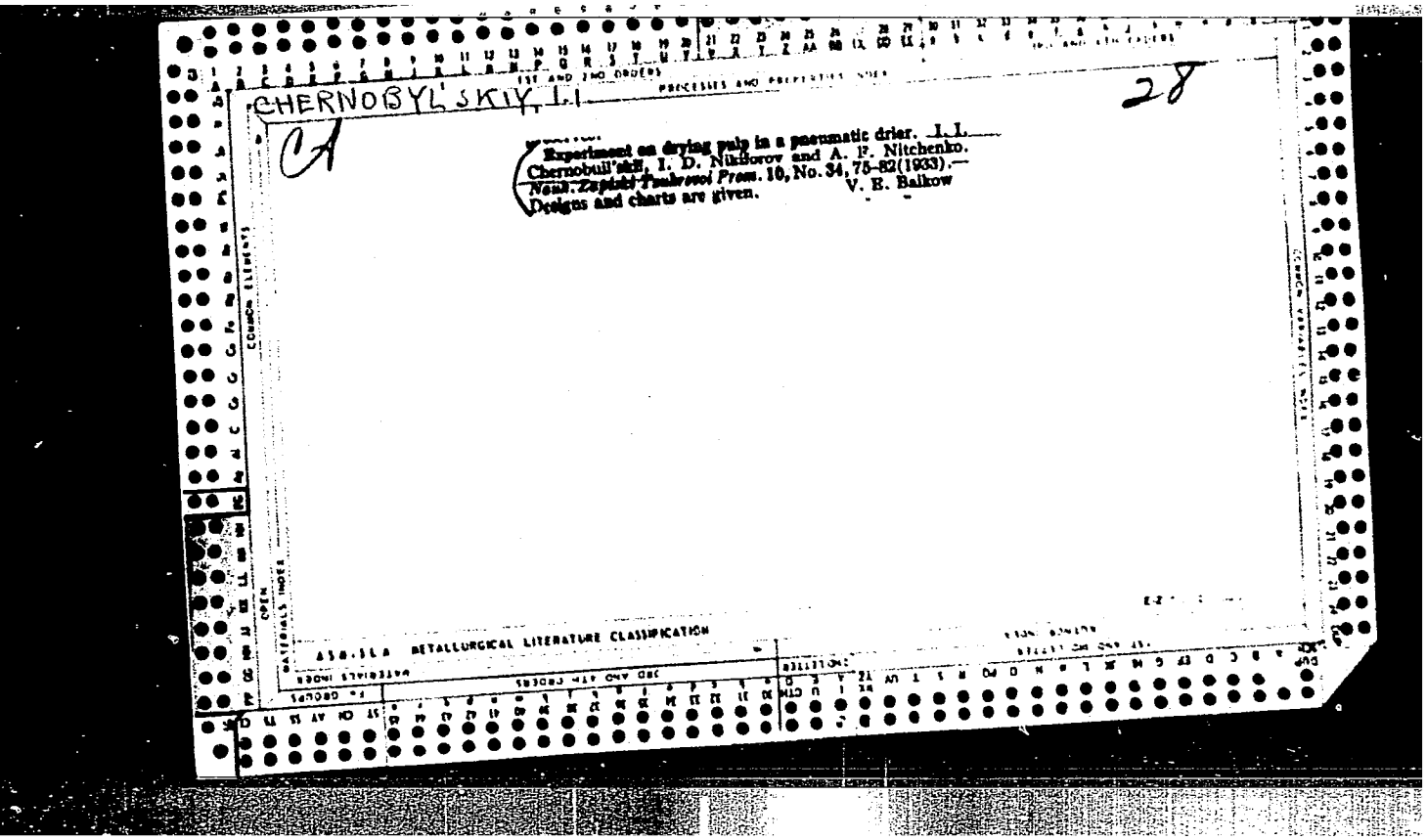


CHERNOBYL'SKIY, I. I.

Modification of the Owen sugar-beet drier. I. I. Chernobulskii and I. D. Nikiforov. *Nauk. Zapiski Tsukrovoi Prom.*, 9, No. 24, 165-70 (1932). *Sugar Abstracts* (in *Facts About Sugar*) **28**, 141.— The original model of the Owen sugar-beet drier has been reconstructed to conform with the latest experience, with particular reference to partial return of the gases.

E. H.





CHERNOBYL'SKIY, I. I.

28

CA

Experiment on drying pulp in a pneumatic drier. I. I. Chernobul'skiĭ, I. D. Nikiforov and A. F. Nitchenko. *Nouv. Zapiski Tsukrovoi Prom.* 10, No. 34, 75–82(1933).— Designs and charts are given. V. E. Balkow

CHERNOBYL'SKIY, I.I., professor, doktor tekhnicheskikh nauk.

Determining the coefficient of heat transfer from one medium to another across a ribbed surface. Sbor.trud.Inst.energ.AN URSR no.3:82-87 '48. (MLRA 9:1)

(Heat--Transmission)

CHERNOBYL'SKIY, I. I. i SHCHEGOLEV, G. M.

26344 Opyt issledovaniya teploperedachi ot kondensiruyushchegdsya para k zhidkosti pri vrashchenii. Teploobmennoy poverkhnosti. Trudy in-ta teploznergetiki (Akad. nauk ukr. SSR), sb. 1, 1949, s. 118-24.

SO: LETOPIS' NO. 35, 1949

CHERNOBYL'SKIY, I. I. (Prof.), KRENNEV. O. A.

Donets Basin - Mine Ventilation

Air conditioning installation in deep mines of the Donets Basin. Ugol' no. 6, 1952.

9. Monthly List of Russian Accessions, Library of Congress, August 1952. 1953, Uncl.

CHERNOBYL'SKIY, I.I., professor, doktor tekhnicheskikh nauk; KHRENOV, O.A., kandidat tekhnicheskikh nauk

Comparative analysis of air conditioning systems for deep coal mines. Trudy Inst. tepl. AN URSR no.8:101-119 '52. (MLRA 8:7)
(Mine ventilation)

CHERNOBYL'SKIY, I.I., professor, doktor tekhnicheskikh nauk; KREMNEV, O.A., kandidat tekhnicheskikh nauk.

Power indices of heat used in air conditioning. Trudy Inst.tepl. AN URSR no.9:18-34 '53. (MLRA 8:6)
(Air conditioning)

CHERNOBYL'SKIY, I.I., professor; KREMNEV, O.A., kandidat tekhnicheskikh nauk; CHAVDAROV, A.S., inzhener.

Investigation of an experimental laboratory lithium-chloride unit for air conditioning by means of low-potential heat. Trudy Inst.tepl.URSR no.12:150-168 '55. (MIRA 9:7)

(Air conditioning) (Lithium chloride)

CHERNOBYL'SKIY, I.I., professor; KREMNEV, O.A., kandidat tekhnicheskikh nauk; CHAVDAROV, A.S., inzhener.

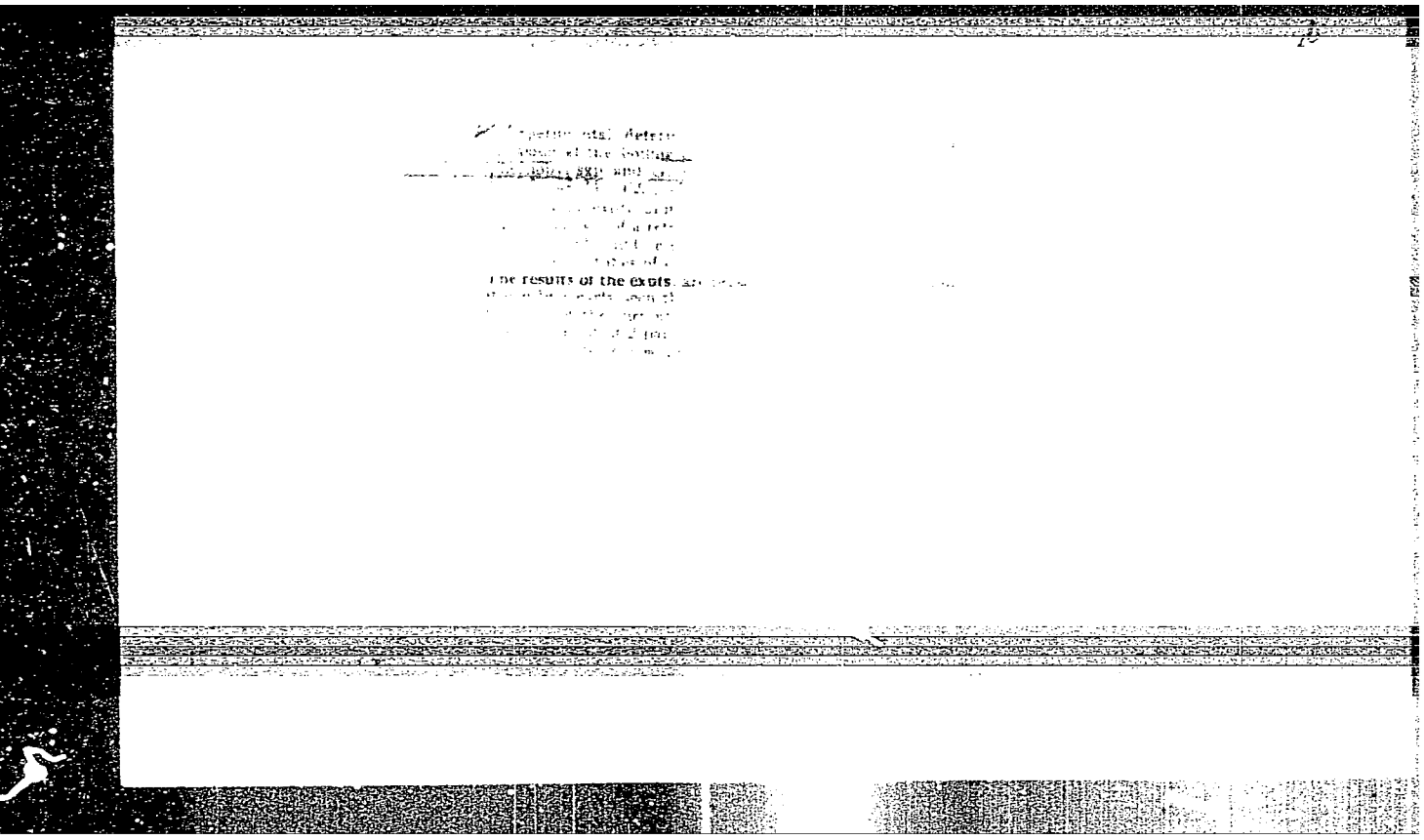
Investigating the operation of a heat-using unit for lowering the heat content of air by treating it with an aqueous solution of calcium chloride. Trudy Inst.tepl.URSR no.12:169-181 '55. (MIRA 9:7)

(Air conditioning) (Calcium chloride)

CHERNOBYL'SKIY, I.I., dokter tekhnicheskikh nauk, professor; KREMNEV, O.A., kandidat tekhnicheskikh nauk; BOROVSKIY, A.L., inzhener; SATANOVSKIY, A.L., inzhener; TYUMENEV, Ya.K., inzhener.

Study of the raw silk drying process on cocoon reelers. Tekst.prom. 15 no.11:15-18 N '55. (MLRA 9:1)

(Silk manufacture)



The results of the exits

SHCHERBAN', A.N.; KREMNEV, O.A.; CHERNOBYL'SKIY, I.I.; UCHASTKIN, P.V.; TETEREVNIKOV, V.N.; YAGEL'SKIY, A.N.; KUCHEROV, P.S., redaktor; TITKOV, B.S., redaktor izdatel'stva; ZHUKOVSKIY, A.D., tekhnicheskiy redaktor

[Cooling and drying of air in deep coal mines] Okhlazhdenie i osushenie vozdukha v glubokikh ugol'nykh shakhtakh. Pod obshchei red. A.N.Shcherbania i O.A.Kremneva. Kiev, Izd-vo Akademii nauk USSR, 1956. 271 p. (MLRA 9:12)

1. Chlen-korrespondent AN USSR (for Kucherov)
(Mine ventilation)

CHERNOBYL'SKIY, I.I.; KREMNEV, O.A.; DANILEVICH, N.N.

Investigation of a vacuum-water absorbtion lithium bromide installation for cooling water used in air conditioning. Trudy Inst.tepl.AN URSR no.13:123-134 '56. (MLRA 10:5)
(Air conditioning)

CHERNOBYL'SKIY, I.I.

Category : USSR/Atomic and Molecular Physics - Heat D-4

Abs Jour : Ref Zhur - Fizika, No 3, 1957, No 6335

Author : Chernobyl'skiy, I.I., Lukach, Yu.Ye.
Title : Investigation of Heat Transfer in the Boiling of Binary Mixtures.

Orig Pub : Izv. Kiyevsk. politekhn. in-ta, 1956, 17, 45-60

Abstract : No abstract

Card : 1/1

SOV/124-57-5-5704

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 5, p 88 (USSR)

AUTHORS: Chernobyl'skiy, I. I., Tananayko, Yu. M.

TITLE: An Investigation of the Heat Transfer to Boiling Water Flowing Through Narrow Annular Openings in the Presence of Moderate Heat Fluxes (Under Conditions Approximating Those in Industrial Evaporators) (Issledovaniye teplootdachi k kipyashchey vode v kol'tsevom prostranstve pri umerennykh teplovykh potokakh)

PERIODICAL: Izv. Kiyevsk. politekhn. in-ta, 1956, Vol 17, pp 61-74

ABSTRACT: An account is given of the results of an experimental investigation made of the heat transfer to boiling water flowing through narrow slit-like annular openings especially made in evaporator-type boiler tubes; atmospheric pressure was maintained in the experiments, and the rate of heat flow q was kept within the moderate range of 20 to 121×10^3 kcal/m^2hr -- which approximates the conditions in industrial evaporators. Included is a diagram of the apparatus used for the experiments. The boiler tubes of the apparatus were heated by steam superheated by some 1-2° and maintained at pressures ranging from 1.28 to 2.46 atm abs.; the secondary vapor generated in the

Card 1/4

apparatus circulated in a closed, externally heated system. The boiler tubes used were seamless and exhibited the normal amount of oxidation; they had received no special treatment or processing; their dimensional characteristics were as follows: (in the case of a steel heating surface) diameter d = 27/21,5 mm, length L = 480 mm; (in the case of a copper heating surface) d = 24.5/19.5 mm, L = 603 mm. Investigated in the experiments was the heat transfer to boiling water flowing through 10 annular slit-like openings formed by inserts placed into the boiler tubes, each such insert being firmly held in place by a special type of adapter bushing. The respective clearance widths δ of the 10 test openings ranged from 1.25 to 14 mm. The authors propose formulas for use in calculations of the type involved. They state that the maximum relative error exhibited by the values calculated with these formulas for the heat-transfer coefficient α_2 was 6.8-8.4%. The data obtained by visual observations and the results of the heat-transfer investigation are examined separately. In one set of experiments the usual type of outer shell that encases an evaporator was replaced by a shell made of a special transparent heat-resistant glass so as to permit visual observation of the boiling process in an internally heated system with external slit-like openings. In this set of experiments the clearance width of the openings was 2.75, 6.75, 10.7, and 14 mm successively. It was found that, when the slit-like openings were made narrower,

the steam bubbles turned out smaller, the flow became severely turbulent, and the amount of steam in it increased. The heat-transfer data obtained by the authors are graphed and tabulated in the paper. Analysis of these data has led them to the following conclusions: 1) For a given width (δ) of the slit-like opening the heat-transfer coefficient α_2 will be the same whether the slit is internal or external; 2) for a given value of said width (δ) the value of the heat-transfer coefficient α_2 is not affected by the nature of the material of which the heating surface consists; 3) when such an opening is reduced in size to the point where its width dimension δ is of the order of the separation (breaking-free) diameter of a steam bubble, the heat-transfer process begins to fall off at a certain "break" in the rate q, which "breaking" rate is a function of the piezometric level of the boiling liquid, of the width of the slit, and, apparently, of the specific properties of the particular boiling liquid involved; 4) as the width of an opening is made smaller (the value of q remaining unchanged), the heat-transfer coefficient α_2 increases with the decreasing temperature of the inner wall surfaces of the opening. In addition, an attempt is made to generalize the results obtained. Into the well-known criterional equations the authors introduce a correctional factor for the opening's width dimension δ ; this enables them to use these equations even when δ is of the order of the separation diameter of the steam bubbles -- a case in which, without the

An Investigation of the Heat Transfer to Boiling Water Flowing Through (cont.)

correction factor, the use of these equations would result in sizable errors. The paper includes a brief account of the history of this whole problem, and the physical principles involved in the investigated processes are explained. Bibliography: 6 references.

G. Ye. Khudyakov

Card 4/4

CHERNOBYL'SKIY, I.I.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA - 1561
AUTHOR ČERNOBYL'SKIJ,I.I., TANANAJKO,JU.M.
TITLE The Heat Transfer on the Occasion of the Boiling of Liquids in an Annular Gap.
PERIODICAL Žurn.techn.fis, 26, fasc.10, 2316-2322 (1956)
Issued: 11 / 1956

The present work investigates the problems of the intensification of the boiling process with the help of tubes with an annular cross section in the case of natural convection and moderate thermal loads. The influence exercised by the width of the annular gap (more accurately the thickness of the layer of the liquid boiling in the annular gap) upon the intensity of heat transfer is investigated. Investigation was carried out with two experimental orders. In the case of the one of these two devices the annular gap was produced by the introduction of a steam-heated heating tube into the boiling-tube. In the other device the tube was heated from without by means of steam, and the annular cross section was formed by the introduction of a not heated inset into the boiling-tube.

Summary of experimental results: In tubes with annular cross section of the intensity of heat transfer increases with a decrease of the width of the gap down to a certain limit. The coefficient α_2 of heat transfer increases as a result of a modification of the character of the formation of steam in the gap, because, with a decrease of the width of the gap the turbulation of the

flow increases, the dimensions of the steam bubbles diminish, and heat transfer from the wall is improved. Above all, the heat transfer coefficient increases in such gaps the dimensions of which are of the order of the breaking-off cross section of a steam bubble. Selection of the most suitable width of the gap is influenced by the physical properties of the liquid and by the intensity of the heat flow.
These experimental results can be generalized both by empirical formulae and by a critical equation. Experiments further showed that neither the material of the tube and of the inlets nor the direction of the heating of the annular layer of liquid exercise any influence on the cosefficient of heat transfer.

INSTITUTION:

CHERNOBYL'SKIY, I. I. (Dr. Tech. Sci.), BALITSKIY, S. A., and MINCHENKO, F. P.

"Results of an Experimental Investigation of Heat Transfer during Boiling of Aqueous Solutions of Lithium Bromide and Chloride under vacuum."

report presented at sci. and tech. session on Heat Exchange during Change of Aggregate State of Matter (by Comm. on High Steam Conditions, Power Inst, AS USSR, and Inst. Thermal Engineering, AS UkrSSR) Kiev, 23-28 Sep 57.

Inst. Thermal Engineering, Acad. Sci. Ukr SSR (for Chernobyl'skiy, and Balitskiy)
Cent. Boiler Turbine Inst (for Minchenko.)

CHERNOBYL'SKIY, I.I.

CHERNOBYL'SKIY, I.I.; LUKACH, Yu.Ye.

Determination of heat emission coefficients in the boiling of binary mixtures. Khim. prom. no.6:362-363 S '57. (MIRA 11:1)
(Distillation) (Heat--Transmission)

CHERNOBYL'SKIY, Iosif Il'ich; KREMNEV, Oleg Aleksandrovich; CHAVDAROV, Aleksandr Savvich; PYATYSHKIN, N.M., kand.tekhn.nauk, otv. red.; FEMENNIK, T.K., red.izd-va; SIVACHENKO, Ye.K., tekhn.red.

[Heat operated air conditioning equipment] Teploispol'zuiushchie ustanovki dlia konditsionirovaniia vozdukha. Kiev, Izd-vo Akad. nauk USSR, 1958. 267 p. (MIRA 11:12)
(Air conditioning--Equipment and supplies)

AUTHORS: Chernobyl'skiy, I. I. Doctor of Technical Sciences, Semilet, Z. V., Candidate of Technical Sciences — SOV/64-58-4-14/20

TITLE: The Investigation of the Coefficients of the Heat Emission of the Spray Heat Exchanger on the Sprayed Surface (Issledovaniye koeffitsiyenta teplootdachi orositel'nogo teploobmennika so storony orosheniya)

PERIODICAL: Khimicheskaya promyshlennost', 1958, Nr 4, pp. 249-252 (USSR)

ABSTRACT: The heat transfer from the outer surfaces of the spray liquid of the above mentioned heat exchangers have been little investigated until now; this makes difficult an exact calculation and a design of this type of heat exchangers. In the case of a slow motion of the air the heat transfer from the wall to the spray liquid plays the main role; the equation by Adams (Ref 21) and that by Ploeg (Ref 22) are recommended for the calculation of the coefficient of heat transfer to the spray liquid. As, however, the two formulae do not yield identical results the authors carried out laboratory investigations with a

Card 1/2

model. They investigated mainly the hydrodynamics of the flowing-off of the thin film along the surface of the horizontal tube. The experiments carried out among other things showed that a change of the diameter of the tube does practically not influence the flow character of the film and the heat transfer coefficient; in this connection the authors give several data. They found that for the intensification of the heat exchange process from the external surface the following is necessary: 1. A regular use, 2. An operation at an optimum wetting density, and 3. The optimum wetting density. There are 3 figures, 1 table, and 22 references, 19 of which are Soviet.

1. Heat exchangers--Performance 2. Heat transfer--Mathematical analysis 3. Liquids--Heat transfer 4. Thin films--Thermodynamic properties